International application No.

PCT/JP00/07953 CLASSIFICATION OF SUBJECT MATTER. Int.Cl G02B13/00, G02B3/00, G02B3/06 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> G02B13/00, G02B3/00, G02B3/06 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched 1926-1996 Toroku Jitsuyo Shinan Koho 1994-2001 Kokai Jitsuyo Shinan Koho 1971-2001 Jitsuyo Shinan Toroku Koho 1996-2001 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) DOCUMENTS CONSIDERED TO BE RELEVANT Category\* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. JP, 58-168026, A (Agency of Industrial Science and Technology), 1-16 04 October, 1983 (04.10.83), Full text; all drawings (Family: none) Y JP, 57-181516, A (Agency of Industrial Science and Technology), 1-16 09 November, 1982 (09.11.82), Full text; all drawings (Family: none) Y US, 5004328, A (Canon Kabushiki Kaisha), 02 April, 1991 (02.04.91), 1-16 Full text; all drawings & JP, 63-96618, A Full text; all drawings & JP, 63-81413, A Full text; all drawings Y JP, 9-96760, A (Mitsui Petrochemical Ind. Ltd.). 08 April, 1997 (08.04.97), 1-16 Full text; all drawings (Family: none) Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents later document published after the international filing date or "A" document defining the general state of the art which is not considered to be of particular relevance priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be earlier document but published on or after the international filing considered novel or cannot be considered to involve an inventive "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other step when the document is taken alone document of particular relevance; the claimed invention cannot be special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document published prior to the international filing date but later "&" document member of the same patent family than the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report 06 February, 2001 (06.02.01) 13 February, 2001 (13.02.01) Name and mailing address of the ISA/ Authorized officer Japanese Patent Office Facsimile No. Telephone No.

International application No.
PCT/JP00/07953

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category\*

Citation of document, with indication, where appropriate, of the relevant passages

Y

JP, 4-284401, A (Fujitsu Limited),
09 October, 1992 (09.10.92),
Full text; all drawings (Family: none)

International application No.

PCT/JP00/07954

CLASSIFICATION OF SUBJECT MATTER

Int Cl7 G02B13/00, G02B3/00, G02B3/06

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) Int.Cl7 G02B13/00, G02B3/00, G02B3/06

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1926-1996 Toroku Jitsuyo Shinan Koho 1994-2001 Kokai Jitsuyo Shinan Koho 1971-2001 Jitsuyo Shinan Toroku Koho 1996-2001

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Y JP, 58-168026, A (Agency of Industrial Science and Technology), 04 October, 1983 (04.10.83), Full text; all drawings (Family: none)  Y JP, 57-181516, A (Agency of Industrial Science and Technology), 09 November, 1982 (09.11.82), Full text; all drawings (Family: none)  Y JP, 6-281854, A (ASAHI OPPICAL Co., Ltd.), 07 October, 1994 (07.10.94), Full text; all drawings (Family: none)  Y US, 5004328, A (Canon Kabushiki Kaisha), 02 April, 1991 (02.04.91), Full text; all drawings & JP, 63-81413, A Full text; all drawings & JP, 63-8618, A Full text; all drawings & JP, 63-96618, A Full text; all drawings	Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Technology), 1982 (09.11.82), Full text; all drawings (Family: none)  Y JP, 6-281854, A (ASAHI OPTICAL Co., Ltd.), 07 October, 1994 (07.10.94), Full text; all drawings (Family: none)  Y US, 5004328, A (Canon Kabushiki Kaisha), 02 April, 1991 (02.04.91), Full text; all drawings & JP, 63-81413, A Full text; all drawings & JP, 63-6618, A	Y	Technology), 04 October, 1983 (04.10.83),	1-6
07 October, 1994 (07.10.94), Full text; all drawings (Family: none)  Y US, 5004328, A (Canon Kabushiki Kaisha), 02 April, 1991 (02.04.91), Full text; all drawings & JP, 63-8413, A Full text; all drawings & JP, 63-6618, A	¥	Technology), 09 November, 1982 (09.11.82),	1-6
02 April, 1991 (02.04.91), Full text; all drawings & JP, 63-81413, A Full text; all drawings & JP, 63-9618, A	у.	07 October, 1994 (07.10.94),	1-6
	Y	02 April, 1991 (02.04.91), Full text; all drawings & JP, 63-81413, A Full text; all drawings & JP, 63-96618, A	1-6

- Further documents are listed in the continuation of Box C. See patent family annex.
- Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but cited to document defining the general state of the art which is not considered to be of particular relevance understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be
- "E" earlier document but published on or after the international filing date
- document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other
- document published prior to the international filing date but later than the priority date claimed
- step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such
- combination being obvious to a person skilled in the art document member of the same patent family

considered novel or cannot be considered to involve an inventive

Date of the actual completion of the international search Date of mailing of the international search report 06 February, 2001 (06.02.01) 13 February, 2001 (13.02.01)

Name and mailing address of the ISA/ Japanese Patent Office Authorized officer

Facsimile No.

Telephone No.

International application No.
PCT/JP00/07954

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVA	NT
Category* Citation of document, with indication, where appre	
A US, 4986939, A (Schott Glaswerke 22 January, 1991 (22.01.91), Full text; all drawings & UP, 63-25234, A Full text; all drawings & DE, 3617363, A	. 1-6
Y EP, 317153, A1 (British Telecomm limited company), 24 May, 1989 (24.05.89), Full text; all drawings & JP, 2-502584, A Full text; all drawings & WO, 89/04979, A & AU, 882725	
Y JF, 4-284401, A (Fujitsu Limited 09 October, 1992 (09.10.92), Full text; all drawings (Family	
<pre>Y</pre>	
	×-
	*
	0.

International application No.

	PCT/JE	200/07956					
A. CLASSIFICATION OF SUBJECT MATTER Int.C1 <sup>7</sup> G02B13/00, G02B3/00, G02B3/06, H0185/02							
According to International Patent Classification (IPC) or to both national classification and IPC  B. FIELDS SEARCHED							
Minimum documentation searched (classification system followed	by classification symbols)						
vanishini documentation accretic (classification system followed by classification symbols)  Int. Cl <sup>7</sup> G02B13/00, G02B3/00, G02B3/06, H0185/02							
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1926-1996 Toroku Jitsuyo Shinan Koho 1994-2001 Kokai Jitsuyo Shinan Koho 1971-2001 Jitsuyo Shinan Toroku Koho 1996-2001							
Electronic data base consulted during the international search (nam	ne ox data base and, where practicable, seas	rch terms used)					
C. DOCUMENTS CONSIDERED TO BE RELEVANT							
Category* Citation of document, with indication, where ap		Relevant to claim No.					
Y JP, 57-181516, A (Agency of Technology), 09 November, 1982 (09.11.82), Full text; all drawings (Fami		1-11					
<pre>JP, 58-168026, A (Agency of Technology), 04 October, 1983 (04.10.83), Full text; all drawings (Fami</pre>	Industrial Science and ly: none)	1-11					
A US, 4986939, A (Schott Glaswer) 22 January, 1991 (22.01.91), Full text, all drawings & JP, 63-25234, A Full text, all drawings & DE, 3617363, A	ke),	1-11					
Y US, 5004328, A (Canon Kabushik: 02 April, 1991 (02.04.91), Full text; all drawings & JP, 63-81413, A Full text; all drawings	i Kaisha),	1-11					
Further documents are listed in the continuation of Box C.	See patent family annex.						
Special categories of cited documents:  "A document defining the general state of the art which is not considered to be of particular relevance "E"  "L"  "Description of the state of the set which is not considered to be of particular relevance "L"  "Description of the state of the state of the international filling date of the categories of the state of the state of the state of the categories of the state of the s	<ul> <li>In ther document published after the international filing three priority does and not in conflict with the application but circle to understand the principle or theory underlying the invention.</li> <li>"Ne" document of particular relevance, the claimful invention cannot be considered novel or cannot be considered to involve an inventive step when the document is then alone.</li> <li>"In document of particular relevance, the claimful invention cannot be combined to with one or more other such document is combined with one or more other such document is combined with one or more other such document is combination being obvious to a person skilled in the art "&amp;" document member of the same patent family.</li> <li>Date of mailing of the international search report</li> </ul>						
06 February, 2001 (06.02.01)	13 February, 2001 (	13.02.01)					
Name and mailing address of the ISA/ Japanese Patent Office	Authorized officer						
racsimile No.	Telephone No.						

International application No.
PCT/JP00/07956

		101/0	F00/0/956
C (Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No
	& JP, 63-96618, A Full text; all drawings	771	-
A	JP, 9-184997, A (Canon Inc.), 15 July, 1997 (15.07.97), Full text; all drawings (Family: none)		1-11
Y	JP, 9-96760, A (Mitsui Petrochemical Ind. L 08 April, 1997 (08.04.97), Full text; all drawings (Family: none)	td.),	1-11
Y	JP, 4-284401, A (Fujitsu Limited), 09 October, 1992 (09.10.92), Full text; all drawings (Family: none)		1-11
	30c		*
	0)(0		
			8
	`		
		-	
			0